

## CHAPTER II

---

### ALTERNATIVE APPROACHES

---

### TO THE CURRENT TAX TREATMENT

---

### OF MILITARY HOMEOWNERS

---

This chapter analyzes the military homeowners tax plan (MHTP), which would eliminate double tax benefits for the military. It considers the impact on the incomes of military homeowners and the effects on military retention. Alternative plans to mitigate these effects also are described and evaluated. Finally, this chapter estimates the budgetary effects that would result from the various approaches.

#### ANALYTIC METHOD AND KEY ASSUMPTIONS

---

Several important assumptions underlie the analysis of the MHTP and other options presented in this chapter. All the approaches are evaluated in comparison with the current tax treatment of military personnel. 1/

CBO's analysis relies on the Administration's most recent estimate of the total number of military homeowners, by pay grade, in the continental United States. The analysis uses information supplied by military members on housing-related costs: mortgage principal and interest payments, real estate taxes, and homeowners' insurance. 2/ Because only the mortgage interest payments and real estate taxes are needed to make the calculations in this study, CBO adjusted the reported housing cost figures to derive the necessary estimates (see Appendix A).

To compute the changes in the federal income tax liabilities of military homeowners under the various alternatives, tax liabilities were estimated under current law and under each of the policy options. CBO used these data and other information to estimate aggregate revenue effects

- 
1. None of the changes contained in recent tax reform proposals are considered here. Military members, like other taxpayers, would be affected by several features contained in these proposals. Those aspects of the plans that would affect the tax liability of service personnel include changes in marginal tax rates, the personal exemption, and allowable itemized deductions, to name a few.
  2. This information comes from a questionnaire, "Variable Housing Allowance Data Collection Form," which was submitted by military personnel to the Per Diem Travel and Transportation Allowance Committee of the Department of Defense.

under the MHTP and to present illustrative examples of the effect of the various options on service homeowners. (Appendix B presents a more detailed description of this estimation procedure.) These estimates also served as the basis for calculating the aggregate budgetary effects of the alternative approaches and their effect on military retention.

Changes in the size of the career force resulting from the various alternatives were derived from a model developed by the Department of Defense (DoD) but using CBO assumptions. This model--the Annualized Cost of Leaving (ACOL) model--relates members' decisions to remain in the armed forces to their potential military and civilian incomes and their preferences for military service. <sup>3/</sup>

Finally, all estimates in this study assume no changes in the quantity of government housing (which the military services might attempt to increase) or in the number of persons who choose to rent housing rather than to buy it. CBO has not estimated the extent of changes in behavior, such as a shift toward more rentals. Therefore, this study does not account for such potential. <sup>4/</sup> But these behavioral changes could occur, and their qualitative effects are discussed.

## EFFECTS OF THE MILITARY HOMEOWNERS TAX PLAN

---

Extending Revenue Ruling 83-3 to eliminate double tax benefits for military homeowners would have several effects, including:

3. More precisely, the ACOL model relates the reenlistment decision to a comparison between the total pecuniary and nonpecuniary returns to leaving military service (RL) immediately, and the total returns to staying (RS) for a determined number of additional years and then leaving the military. Accordingly, service members will remain in the military if there is at least one period of additional service over which RS is greater than RL. Therefore, all other things being equal, real increases (decreases) in basic pay raise (lower) the cost of leaving military service immediately, thus raising (lowering) the reenlistment rates. For a fuller description of the ACOL model, see Department of Defense, *Fifth Quadrennial Review of Military Compensation*, Vol. IB: *Supporting Appendixes to Uniformed Services Retirement System* (January 1984).
4. There is a literature on housing tenure choice which might provide a basis for such an estimate. See, for example, Harvey S. Rosen, Kenneth T. Rosen, and Douglas Holtz-Eakin, *Housing Tenure, Uncertainty, and Taxation* (Department of the Treasury, OTA Paper 54, February 1983). The existing models for estimating tenure choice, however, would in all likelihood have to be modified to reflect the factors affecting the housing decisions of military personnel.

- o Lower after-tax income;
- o Increased taxes; and
- o Lower retention of career military personnel.

### Impact on Homeowner's Income

The tax plan would lower the after-tax incomes of military homeowners, with the amount differing by pay grade and location. Illustrative examples of the impact of this plan on service homeowners can be calculated by estimating the decrease in tax deductions and the associated increase in taxes. These changes typically will depend on homeowners' pay grades and duty locations. Table 1 presents the percent of military homeowners in different pay grades in locations regarded by DoD as typical of low- and high-cost areas.

For perspective, the MHTP changes in taxes and deductions were compared with a measure of net income across pay grades and local areas under current law. Unfortunately, variations in special pays, allowances, and state and local taxes (to mention a few) make the net income of military personnel difficult to estimate. Moreover, the possible addition of income from a working spouse further complicates the estimation of the net income available to a military household. Some, but not all, of these concerns were addressed in the calculation of the estimates presented in this study. To account for some of the variations in income, CBO used service members' taxable income--basic pay and special and incentive pays--obtained from extracts of the active pay master files of the Joint Uniform Military Pay System.

Thus, in this analysis, the deduction and tax changes were compared with current cash take-home pay that military members receive. This is defined to include taxable income (basic pay and special and incentive pays) plus nontaxable allowances (basic allowance for quarters, variable housing allowance, and subsistence allowance) less federal income and Social Security (FICA) taxes. Cash take-home pay is unambiguous, but it underestimates the income of some military personnel (such as those who have investment or asset income or income from a working spouse) while it overestimates the take-home pay of others (those who pay state and local taxes). <sup>5/</sup> Cash take-home pay also ignores housing and food allowances that some military personnel receive in tax-free income as compensation for living in "substandard" government quarters.

---

5. It should be noted that many military members claim legal residence in states that do not tax their military pay. Thus, they are able to avoid paying state and local taxes.

TABLE 1. PERCENT OF MILITARY PERSONNEL WHO OWN HOMES, BY SELECTED AREA AND PAY GRADE, JANUARY 1984<sup>a/</sup>

Selected Area	O-6	O-3	E-7	E-5
Low-Cost Area				
Jacksonville, N.C.				
Owners	84	83	72	44
Nonowners	16	17	28	56
Fort Benning, Ga.				
Owners	83	46	71	30
Nonowners	17	54	29	70
High-Cost Area				
San Diego, Calif.				
Owners	85	42	59	13
Nonowners	15	58	41	87
Los Angeles, Calif.				
Owners	78	31	43	12
Nonowners	22	69	57	88

SOURCE: Congressional Budget Office, from Department of Defense, Defense Manpower Data Center (January 1984).

a. The "O" in pay grades designates officers; the "E" denotes enlisted personnel.

Tax Increases. Two trends emerge from an analysis of the estimated tax increases of military homeowners under MHTP (see Table 2). First, as one would expect, the magnitude of the tax increase tends to grow with the rise in pay grade. For example, taxes for an E-5 homeowner in Los Angeles, California, would increase \$608, while an O-6 homeowner in the same location would have an increase of \$4,035. <sup>6/</sup> The more senior people have higher allowances and are in higher tax brackets. Even when tax increases are measured as a percent of take-home income, homeowners in senior pay grades would bear the brunt of this change. This finding reflects both the income elasticity of housing expenditures and the progressive nature of the U.S. tax system, which puts those in more senior pay grades in higher brackets and hence makes the loss of the double tax benefits more costly.

6. The "E" in pay grades denoted enlisted personnel; the "O" designates officers.

The effects on senior pay grades are more striking when one considers that those in senior pay grades are more often homeowners. As Figure 1 illustrates, roughly 40 percent or more of the officers in each of the ranks O-3 or higher are homeowners. Likewise, for enlisted personnel, 40 percent of those in ranks E-7 or higher are homeowners (see Figure 2). In the lower ranks, E-5 or below for enlisted and O-1 and O-2 for officers, less than 20 percent of the members in each grade own homes.

Second, within a pay grade, tax increases in most cases would be higher in areas where higher housing allowances are paid, reflecting higher living costs. For example, a service homeowner at the E-7 level in Jacksonville, North Carolina (defined by DoD as a low-cost area) would have

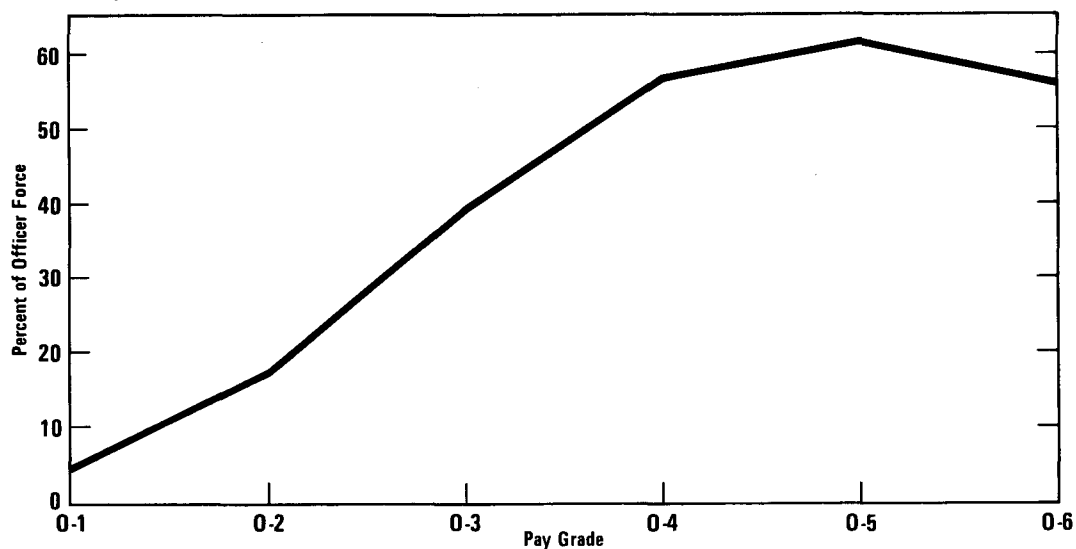
TABLE 2. REPRESENTATIVE HOMEOWNER TAX INCREASES IN FISCAL YEAR 1986 UNDER MILITARY HOMEOWNERS TAX PLAN, BY SELECTED AREA AND PAY GRADE a/

Selected Area	O-6	O-5	E-7	E-5
<b>Low-Cost Area</b>				
Jacksonville, N.C.				
Dollars	2,574	1,033	410	126
Percent <u>b/</u>	5.2	3.3	1.8	0.7
Fort Benning, Ga.				
Dollars	2,607	1,033	326	161
Percent <u>b/</u>	4.6	3.1	1.3	0.9
<b>High-Cost Area</b>				
San Diego, Calif.				
Dollars	2,953	1,505	1,016	573
Percent <u>b/</u>	5.6	4.5	3.9	1.1
Los Angeles, Calif.				
Dollars	4,035	1,736	1,064	608
Percent <u>b/</u>	7.4	4.9	3.9	2.9

SOURCE: Congressional Budget Office.

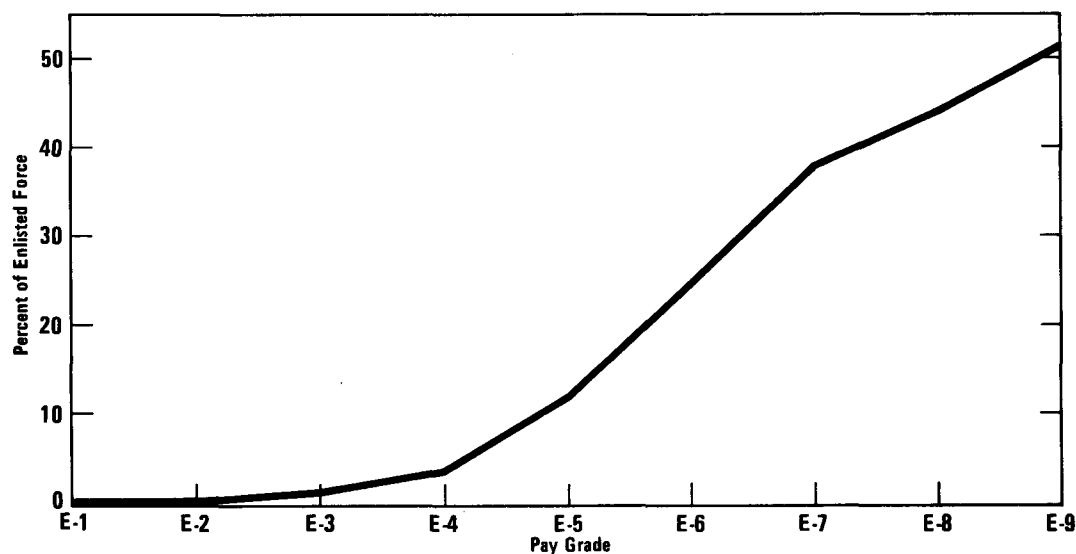
- a. The "O" in pay grades designates officers; the "E" denotes enlisted personnel.
- b. Homeowner tax increase as a percent of military member's income (which includes basic pay, BAQ, VHA, subsistence allowance, and special and incentive pays) less taxes (federal and Social Security).

Figure 1.  
Percentage of Officers Who Own Homes, by Pay Grade,  
January 1984



SOURCE: Congressional Budget Office, based on information from Defense Manpower Data Center.

Figure 2.  
Percentage of Enlisted Personnel Who Own Homes, by Pay Grade,  
January 1984



SOURCE: Congressional Budget Office, based on information from Defense Manpower Data Center.

a tax increase of \$410, compared with an increase of \$1,064 borne by his counterpart in Los Angeles (a high-cost area).

Although the numbers in Table 2 suggest that taxes would be higher for the average service member in a particular location and pay grade, increases could be higher or lower depending on circumstances. For example, an O-6 in Los Angeles would experience an increase of \$4,035 in taxes (see Table 2). But if other income (for example, a member's outside income or that of a working spouse) placed that O-6 in a higher federal tax bracket (with an assumed taxable income of \$100,000), then his or her tax increase could amount to \$5,336 rather than the amount depicted in Table 2. Individual losses could also vary depending on local housing market conditions. If, for example, housing was more expensive than average, or if a particular military member chose to spend a larger-than-average percentage of his or her income on housing, then that member's tax increase could be higher than shown in Table 2.

### Force Manning Effects

Because the MHTP would reduce take-home pay for homeowners, it would adversely affect the retention of career personnel in the long run. <sup>7/</sup> Career force reductions would be modest over the next five years, because not all those members directly affected by the homeowners tax plan would make reenlistment decisions during this period. But after 10 to 15 years, when the change had had time to affect many career decisions, CBO estimates that the military services would have between 2,500 and 10,500 fewer members in the career force than they would under the current tax treatment of military homeowners (see Table 3). This range represents a reduction of 0.2 to 0.9 percent in the military career force. The lower bound reflects the impact on current military homeowners only, while the upper bound allows for the possibility that nonhomeowners who might anticipate owning a home would also be affected. <sup>8/</sup>

Of these losses of career personnel, about 1,350 to 3,830 are projected to come from the officer ranks while 1,150 to 6,670 are estimated to be

---

7. Career members are defined here as those with more than four years of service.

8. For more detail on the derivation of these estimates, see Appendix C.

enlisted members. Relative to today's levels, this would reduce the enlisted career force by between 0.12 percent to 0.71 percent and the officer force by 0.67 percent to 1.90 percent. <sup>9/</sup> Losses of this magnitude are small in comparison with the annual fluctuations in overall retention. For example, the average annual change in the size of the career force over the past five years has been 3 percent. The estimated change associated with the MHTP would at most be less than 1 percent of the career force and would take 10 to 15 years to occur.

These estimated career force losses contrast with estimates by senior military personnel that "tens of thousands" would leave if the double tax benefits were eliminated. <sup>10/</sup> CBO's estimates are modest because the tax savings from housing allowances are a relatively small part of total military compensation. <sup>11/</sup> Moreover, senior personnel would be most affected by a change in homeowners taxes and they would be less likely to leave military service. Senior personnel are both more committed to their military careers and have strong economic incentives to serve at least 20 years to earn retirement benefits.

The lower and upper ends of the range probably under- and overstate losses, respectively. The lower bound of CBO's estimates assumes that only the fraction of personnel who are homeowners at any one time would alter their retention decisions. In all likelihood, this assumption understates the full effect of the potential change. Members who are now renting or living in government quarters might previously have been homeowners and, thus, would be concerned with the MHTP. Other members might anticipate becoming homeowners in the future and, thus, might be more likely to leave the military if their potential tax benefits were reduced. To account for this possibility, a rather strong alternative assumption was made concerning

- 
9. Estimates of retention effects are sensitive to the income measure used in the calculations. To the extent that the income measure employed here (cash take-home pay) greatly overestimates or underestimates members income, the retention estimates may be biased.
  10. *Charitable Contributions and Ministers' and Military Housing Deductions*, Hearings before the Subcommittee on Taxation and Debt Management of the Senate Committee on Finances, 98:2 (1984), p. 52.
  11. Total military compensation can be broken down into four categories: (1) regular military compensation (which includes basic pay, allowance for subsistence, allowance for quarters, and tax advantage); (2) special and incentive pays (such as flight pay and submarine duty incentive pay); (3) supplemental benefits (such as medical care); and (4) personnel cost reimbursements (for example, clothing issues and maintenance allowances).



TABLE 3. LONG-RUN EFFECTS OF MILITARY HOMEOWNERS TAX PLAN ON CAREER FORCE

Career Force	Total Under Current System	Incremental Change Under Homeowners Tax Plan	
		Lower Bound	Upper Bound
Enlisted			
Number/increment	935,069	-1,150	-6,670
Percent change		-0.12	-0.71
Officer			
Number/increment	201,731	-1,350	-3,830
Percent change		-0.67	-1.90
DoD Total			
Number/increment	1,136,800	-2,500	-10,500
Percent change		-0.22	-0.92

SOURCE: Congressional Budget Office.

prospective homeownership. All members--both current nonhomeowners and homeowners--were assumed to have equal (non-zero) probabilities of homeownership in the future. In effect, this approach means that all service members would expect to be affected directly by the MHTP.

Current patterns of homeownership in the military show that less than 25 percent of service members in the continental United States are homeowners. Moreover, homeownership is concentrated in senior ranks and is more common among officers than noncommissioned officers. These patterns suggest that many current nonhomeowners are not likely to become homeowners during their military careers. The "upper bound" assumption of equal probabilities of homeownership for all members, thus, seems likely to overstate the losses in the career force as a result of the MHTP.

Moreover, a shift toward more rentals by military personnel could cause the estimates in Table 3 to be too high. If homeownership became more costly because the double tax benefits were eliminated, more persons might rent homes. Depending on local rental prices, such a change could avoid some of the loss in income and so offset the incentive to leave the military. This does not mean that renting is an ideal situation. Many ser-

vice members may not find renting as desirable as owning homes. <sup>12/</sup> Renters may not feel the same sense of stability and community as homeowners. Also, renters do not benefit directly from increases in housing prices, such as those that have occurred in recent years. A shift toward renting, however, should reduce at least some of the adverse effects on retention from the loss of present or prospective tax deductions.

### OFFSETTING CAREER LOSSES

Even though the MHTP would cause only modest reductions in the career force, some of the losses nevertheless might occur in hard-to-fill skills and, therefore, might eventually harm military readiness. This could be especially true if other changes, such as a revision of the military retirement system mandated by the Congress, also tended to reduce retention.

As discussed earlier, the Congress could ameliorate career losses resulting from the tax plan by making all housing allowances taxable while providing offsetting increases in pay. This would, however, entail a complex and far-reaching proposal that the Administration has apparently rejected.

The Congress could also avoid career losses while eliminating the double tax benefits by restructuring housing allowances to provide homeowners more compensation. This option, however, would exacerbate an already complex element of military compensation, and it would be all but impossible administratively to compensate individual members exactly for their lost tax benefits.

### Alternative Approaches

This study evaluates three alternative plans for increases in basic pay or bonuses to offset some or all of the career losses that might impair military readiness. The **first option** would offset all losses by providing the requisite increase in basic pay to all service members, whether or not they own homes and regardless of their pay grade. This approach would result in a pay raise of 0.15 percent to 0.7 percent for all active-duty enlisted personnel--with the range reflecting the lower-bound and upper-bound estimates of career losses--and 0.25 percent to 2.05 percent for all officers. The raise for officers is much larger for two reasons. First, officer retention has a lower

---

12. See statement of Sharon Shipe, Vice President For Legislative Affairs, National Military Family Association, before the Subcommittee on Taxation and Debt Management of the Senate Finance Committee, 98:2 (October 15, 1985).

pay elasticity (that is, the change in retention that can be expected from a change in pay) than does enlisted retention. Second, because the incidence of homeownership is higher for officers, more career personnel would be lost unless the raise was large enough to offset partially the loss in tax benefits.

The **second option** would again offset all career losses by targeting the raises to selected pay grades that would be among those most disadvantaged by the homeowners tax plan. Under this option, an increase of 0.3 percent to 1.6 percent in basic pay would be directed toward pay grades E-5 and E-6, and a 0.5 percent to 4.25 percent increase toward pay grades O-4 and O-5. These particular pay grades are among the ones within which homeowners would tend to incur the largest losses from the MHTP, measured as a percentage of their cash take-home pay. Thus, equity considerations support increased compensation for these personnel. In addition, analysis showed that raises targeted on these pay grades are the least costly way of restoring the career force losses that would result from the MHTP. Although many of the service members in these pay grades already are "locked in" by the military retirement system, the prospective increase in future military compensation apparently serves as an effective retention incentive for more junior personnel as well as those who would actually receive the targeted pay increases.

The **third option** would provide a bonus for enlisted personnel only, targeted on the period during which first-term and second-term reenlistment decisions are made (that is, at five and nine years of service). This alternative would provide bonuses for enlisted personnel equivalent to 0.25 percent to 1.25 percent increase in basic pay at five years of service and 2.1 percent to 14.0 percent at nine years of service. This option represents a more efficient approach to force manning than even the targeted raises, since it would allow pay increases to be targeted on enlisted personnel in hard-to-fill skills at sensitive career points. It would not, however, offset adverse effects on officer manning. Reenlistment bonuses would be harder to implement for officers who do not generally receive such payments. On the other hand, officer force manning problems in recent years have, in general, been less severe than enlisted problems.

### Career Force Effects

Table 4 shows the required pay raises needed under the three options to forestall the estimated reductions in the career force that would occur under the homeowners tax plan. The most noteworthy feature about the pay-raise options is that they involve, in most cases, small increases.

Except for the targeted raise for selected officers and the bonus in the ninth year of service that are associated with the upper bound, all the offsetting pay increases are less than about two percent of basic pay.

While all three alternatives would eliminate some or all the adverse effects of the MHTP on the total size of the career force, they would still have distributional influences. Since the increase in basic pay would accrue to service members (either across-the-board or in targeted pay grades) regardless of homeownership, the raise would serve to increase retention rates among nonhomeowners while partially offsetting some of the losses among homeowners.

TABLE 4. ALTERNATIVE PAY RAISES TO OFFSET SOME OR ALL OF THE LONG-RUN EFFECTS OF MILITARY HOMEOWNERS TAX PLAN (MHTP) ON CAREER FORCE

	Incremental Raises to Offset Losses (in percents)		
	MHTP with Raise for All <u>a/</u>	MHTP with Targeted Raises <u>b/</u>	MHTP with Targeted Bonuses <u>c/</u>
Career Force			
Enlisted			
Lower bound	0.15	0.30	0.25-2.10
Upper bound	0.70	1.60	1.25-14.00
Officer			
Lower bound	0.25	0.50	0.00
Upper bound	2.05	4.25	0.00

SOURCE: Congressional Budget Office.

- a. A raise in basic pay for all active-duty personnel.
- b. Targeted basic pay increases for all personnel in pay grades E-5 and E-6 and pay grades O-4 and O-5.
- c. Targeted bonuses for active-duty enlisted members at the first- and second-term reenlistment points.

Budgetary Effects

The three pay options would not only offset career force losses, but also, in most cases, would generate net savings to the government. Table 5

TABLE 5. BUDGETARY EFFECTS IN FISCAL YEAR 1986 OF  
ALTERNATIVE APPROACHES TO MILITARY  
HOMEOWNERS TAX PLAN (MHTP)  
(In millions of dollars)

Option	Net Annual Savings (+)/Costs(-)	
	Lower Bound	Upper Bound
MHTP with No Offsetting Raise in Basic Pay	+ 290	+ 290
MHTP with Raise in Basic Pay for All <u>a/</u>	+ 207 <u>b/</u>	- 210 <u>b/</u>
MHTP with Targeted Raises <u>c/</u>	+ 233 <u>b/</u>	- 124 <u>b/</u>
MHTP with Targeted Bonuses <u>d/</u>	+ 274 <u>e/</u>	+ 191 <u>e/</u>

SOURCE: Congressional Budget Office.

- a. A 0.15 percent to 0.7 percent raise in basic pay for all enlisted personnel and a 0.25 percent to 2.05 percent raise for all officers.
- b. This figure reflects increases in both basic pay and retirement accrual costs.
- c. Targeted basic pay raises of 0.3 percent to 1.6 percent for pay grades E-5 and E-6 and 0.50 percent to 4.25 percent for pay grades O-4 and O-5.
- d. Targeted bonuses of 0.25 percent to 1.25 percent for all enlisted personnel at five years of service and 2.1 percent to 14.0 percent at nine years of service.
- e. This number reflects increases in basic pay only.

summarizes the impact of the alternative approaches on the federal budget. If the MHTP were imposed without any offsetting pay raises, the net savings that would be realized would be about \$290 million in 1986. The alternative plans, on the other hand, would offset some of the savings from the MHTP. Indeed, net costs would be incurred for the across-the-board and targeted pay raise options if career force losses approached the upper-bound estimate.

The pay raises necessary to offset estimated lower-bound losses in the career force under the MHTP would yield net savings under all three options. Across-the-board raises for enlisted and officer personnel in all skills and longevity ranges would result in net savings of \$207 million. Alternatively, the option calling for targeted raises for selected pay grades (E-5 and E-6 for enlisted personnel and O-4 and O-5 for officers) would give rise to higher net savings totaling \$233 million. Savings would be even larger if bonuses are focused only on enlisted personnel in hard-to-fill skills at the first- and second-term reenlistment points; this approach would yield net savings of \$274 million.

On the other hand, if the career force losses under the MHTP were closer to the upper-bound estimate, the budgetary impact of the three options would be somewhat different. In that case, a combination of larger steady-state personnel losses and the raises needed to offset them would result in net costs of \$210 million under the across-the-board pay raise option. Similarly, the targeted pay raise plan would also involve net costs of approximately \$124 million. Only the option providing bonuses targeted on enlisted personnel in critical skills at sensitive career points would yield net savings of \$191 million; under this option, however, there would still be officer career force losses.

This analysis has showed that the double tax benefits could be eliminated for military homeowners without substantial impact on the retention of members of the officer and enlisted career forces. But even if compensation were increased, either across-the-board or in selected pay grades, to avert these modest projected losses, net budgetary savings would probably be realized. These savings would fail to materialize only in the upper-bound case of this analysis. But as discussed earlier, there are reasons to believe that the upper-bound estimates overstate the likely effect of the MHTP. On balance, therefore, elimination of the double tax benefit could probably be achieved without any net career force losses while contributing modestly to federal deficit reduction.